1

Increasing Reading Fluency of Elementary Students: Information for the Educational Leader to Use in Making Decisions*

Kristin Craft Rebecca Robles-Piña

This work is produced by OpenStax-CNX and licensed under the Creative Commons Attribution License 2.0^{\dagger}

Abstract

Educational leaders need to ask themselves how it is possible that nearly 40% of 329,969 Texas fourth grade students are reading below grade level? With accountability standards rising, how does any school with an at-risk population produce fluent readers and in turn master grade level expectations? Scholars agree that meaning derives from phrases, not isolated words. How many elementary students are still struggling with word-by-word reading? The purpose of this paper is to assist educational leaders in identifying best practices related to specific fluency interventions and to call attention to the topic of explicit fluency instruction. The identification of best practices for improving reading fluency is important for educational leaders such as principals to know and use in basing important decisions regarding reading programs.



NOTE: This module has been peer-reviewed, accepted, and sanctioned by the National Council of Professors of Educational Administration (NCPEA) as a scholarly contribution to the knowledge base in educational administration.

1 Introduction

The National Center for Education Statistics ([NCES], 2004) indicates that nearly 40% of America's fourth grade students are below the basic level in reading. In the year 2000, oral reading fluency was identified

^{*}Version 1.2: Oct 10, 2008 10:27 am +0000

[†]http://creativecommons.org/licenses/by/2.0/

as one of the five critical components of reading instruction as described in the National Reading Panel Report (National Institute of Child Health and Human Development, 2000). Further, over the last twenty years literacy experts have stated that fluency continues to be the most neglected goal in reading instruction (Allington, 1983; Anderson, 1981, Chard, Vaughn, & Tyler, 2002). In days of limited resources and increased accountability, it is incumbent on educational leaders to identify best practices in increasing reading fluency to use in improved decision making regarding reading programs.

In the academic year 2005-06, Texas public schools educated 329,969 fourth grade students (U.S. Department of Education, 2006). If the NCES statistic holds true, approximately 40% of 329,969 Texas fourth grade students are reading below grade level. This is a staggering statistic that affects classrooms across the state of Texas. When at least one in five students has significant difficulties with reading acquisition, teachers, administrators, and program directors must study fluency interventions to better equip developing readers (Lyons & Moats, 1997). In 2002, the National Assessment of Educational Progress (NAEP) measured oral reading rates of fourth grade students. Among the many findings, the oral reading of approximately 61% of fourth grade students was characterized at the fluent level (Daane, Campbell, Grigg, Goodman, & Oranje, 2005). Lack of reading fluency impacts student performance on high-stakes testing as word-by-word reading greatly impairs a student's comprehension of a text. Texas' Student Success Initiative mandates that every child in grades 3, 5 and 8 meet the minimum passing criteria in reading as measured by the Texas Assessment of Knowledge and Skills (TAKS). Intermediate and middle schools will encounter even greater numbers of students who are dis-fluent, choppy readers, who will in turn struggle to meet accountability expectations, unless explicit instruction is provided to raise students' ability to read and comprehend a variety of texts.

Chard et al. (2002) defines fluency as the speed and accuracy in which a student reads text orally. Rasinski (2004) explains that fluency has three pieces that build a bridge to comprehension: (a) accuracy in word decoding, (b) automatic processing, and (c) prosodic reading. The NAEP has described fluency as the appropriate chunking of words into phrases with correct intonation, stress, and pause (Tyler & Chard, 2000).

When students receive high quality instruction, fluency rates will rise. Hosp, Hosp, and Howell (2007) stated that a first grader can improve their oral reading fluency by three words in one week and a fourth grader can gain one additional word per week. Explicit instruction geared towards fluency can have an immediate impact. Studies included in the literature review share gains made in short-term applications.

The purpose of this paper is to help educational leaders identify best practices for improving oral reading fluency for elementary students and to use the information for improved decision making. The research will demonstrate that elementary students who are still struggling to read fluently will benefit from: (a) phrased-text cues, (b) repeated reading, (c) a combination of intervention treatments, and (d) brief experimental analysis of the most successful current interventions as determined through meta-analysis research.

2 Literature Review

Academic Search Complete yielded 99 matches to the keywords reading fluency and intervention. Fluency and struggling reader matched to 28 references. When entered phraseology and fluency in ERIC only one article matched. Phrase boundaries and struggling readers yielded no matches. Searches were also completed on EBSCOhost. Key words fluency and struggling reader yielded 21 matches of which six were selected to review. Key words reading fluency and intervention matched to 43 references, of which 12 were reviewed. Due to the number of references, the search was narrowed down to include topics of low readers, and repeated reading or other specific instructional strategy.

3 Phrased-Text Cues

Researchers agree that meaning is derived from phrases. In a paper Rasinski presented at a national reading conference in 1987, he cited a seminal work that stated that fluent readers read text in phrase-like units and teaching non-fluent readers to read in phrases has been advocated by reading authorities (Rasinski, 1987).

Fifty years later, Rasinski (1994b) defined a phrase-text cue as a written passage where phrase boundaries within sentences are marked for the reader. Rasinski (1994b) expressed the following:

If an ability to phrase written texts into syntactically appropriate units is necessary

for fluent and proficient reading, and if good and poor readers exhibit different levels of ability to phrase text appropriately, then corrective instruction to help students learn to phrase text may be needed. One approach to help students develop sensitivity to syntactic units in texts and proficiency is using those units to aid overall reading is the use of phrase-cued texts. (p. 166)

A phrased-text cue lesson is taught to individuals or small groups of students over two consecutive days for 10-15 minutes (Rasinski, 2003). Prior to the lesson, the teacher marks the selected text with / marks to give the reader cues on chunking phrases. The teacher models the reading before students practice aloud and with partners. Rasinski (2003) stated that over time, students develop their understanding of how texts are phrased and apply that understanding to new texts.

Rasinksi (1990a) reviewed forty years of research to better understand the impact of phrased-text cues on adults, school-age children, and hearing-impaired children. Table 1 refers to the studies related to elementary and secondary students. This early research indicates that phrased-text cues are an effective way to increase a student's fluency across grade levels, however in e-mail communication, Rasinski stated that there is little recent research in this field (personal communication, July 12, 2008). Furthermore, the literature review did not produce specific current studies conducted to examine the usefulness of phrased-text cues. An important part of phrased-text cues is repeated reading (RR), thus the literature review includes research on RR.

Table 1 Phrased-Text Cue Studies

Author	Year	Findings	
Mason & Kendall	1979	Gr 4 students' comprehension improved when phrases were cued	
Stevens	1981	Gr 10 students did better on standardized tests when read phrase-cued versions	
Weiss	1983	Gr. 4 and Gr. 7 students made gains when using phrase- cued text	
Gerrell & Mason	1983	Gr 5 students' comprehension noted significant difference	
O'Shea & Sindlear	1983	Gr 1-2-3 students made gains	
Taylor et al.	1985	Phrased-text cues did not affect comprehension	
Source: Rasinski, V. T. (1990a).			

Table 1

4 Repeated Reading

Phrased-text cues is an effective strategy due to repeated reading (RR) that is built into the lesson sequence. Rasinski, Padak, Linek, and Sturtevant (1994a) studied the effectiveness of the fluency development lesson (FDL) in four second grade urban regular education classrooms. FDL was designed as a 15-minute supplement lesson during which students practiced oral repeated reading of a variety of selected texts ranging from 50-150 words. The seven-month duration of the study did not yield statistically significant results although

there were improvements in oral reading rate. Rasinski et al. (1994a) called for additional research into reading fluency using the FDL approach that encompasses larger sample sizes.

Reader's Theatre (RT) is another engaging instructional strategy to build fluency, which include RR techniques. Griffith and Rasinski (2004) applied RT to Griffith's fourth grade Title I classroom. A six-year summary of basal-driven versus a fluency-enhanced program noted that although the beginning levels of fluency for the students served during each time frame began roughly at a third grade reading level, the fluency-enhanced program produced more students reading on-grade level by the end of the year. Griffith and Rasinski stated that by the end of the fourth grade year, 93% of Griffith's at-risk students were reading on or above grade level, compared to only 22% of her at-risk students using a basal-driven approach. Although Griffith served a different group of students each year, the three-year implementation of this program generates strong, fluent readers. Although the study spans six years, the small sample size is a limitation, nine students in the basal approach and 15 students in the fluency approach.

Despite the gains that RR produces, Rasinski (1990b) pointed out that many alternatives to repeated reading (RR) exist to build fluency, namely listening-while-reading (LWR). He stated that drawbacks to the RR are that students tire from its use, students lose motivation for repeating material, and teachers exert more time initially as students need greater assistance in reading text due to unknown words. Rasinski stated that both approaches are effective in improving fluency, however the short time duration, small sample size, and lack of transfer measures to ensure long-term retention of fluency gains are among the limitations.

5 Multiple Treatments

Studies have been conducted that plan for multiple treatments to raise fluency rates. Martens et al. (2007) evaluated the affects of a fluency-based after-school reading program for second and third grade students that included a series of treatments: phrase drill (PD), listening passage preview (LPP), and repeated reading (RR). Martens found that students in the intervention group showed large gains in oral reading fluency and the gains were larger after the two-day retention period. Consequently, one of the limitations he explains is that long-term maintenance of fluency gains was not assessed.

Phrase drill (PD) differs from phrased-text cues in that a child practices a phrase that is mispronounced. PD error correction is a procedure which involves (a) consequent modeling on the part of the instructor and (b) prompting the student to repeatedly practice the phrase from the text which includes the error (Begeny, Daly & Vallely, 2006). Due to the frequent, immediate practice of an error, PD is similar to RR.

Similarly, Begeny and Martens (2006) studied the impact of fluency instruction delivered to two small groups of students using four strategies: practice words in isolation, RR, passage preview (PP), and PD error correction. They concluded that students made gains in oral reading rates on trained passages and the gains transferred to non-practiced material. An equally important limitation to the small sample size, is that four treatments were used and Begeny and Martens found it difficult to distinguish if one of the treatments was more effective than another.

6 Brief Experimental Analysis

An emerging field of research that directly applies data-based decision making to academic interventions is brief experimental analysis (BEA) of oral reading fluency (Burns & Wagner, 2008). Burns and Wagner studied the most recent research of reading fluency interventions to determine which treatments were most effective within a short time frame. Six common fluency interventions were studied: incentive, performance feedback, student passage preview, listening passage preview (LPP), repeated reading (RR), and phrase drill (Burns & Wagner). Their analysis of current research indicates that incentives, RR, and a combination of LPP and RR were the most frequently attempted interventions. The interventions that had the greatest impact were the combination of listening passage, repeated reading, and performance feedback with and without incentives (Burns & Wagner). Taken individually, setting goals, providing feedback on reading performance, and providing reinforcers for achieving goals did not improve reading fluency within a brief experimental analysis (Burns & Wagner).

Thierren (2004) conducted a meta-analysis on fluency and comprehension gains using repeated reading (RR). Thierren found that when a passage was read three or four times fluency increases were more than 30% more than when a passage was read only twice. Thierren further recommends that students read passages aloud to adults. Fluency and comprehension effect sizes for students who read to adults were more than three times larger than when a student read to a peer (Thierren).

7 Discussion

There is a need for research to be done with larger sample sizes (see table 2). To prove the use of phrased-text cues is powerful, future researchers can use the information from these studies to plan for larger sample sizes, which could include urban and suburban elementary school settings. However, with a larger sampling comes the need for staff development for the teachers involved with the implementation of the intervention strategies.

Table 2 Comparison of Purpose, Sample Size, and Duration

Author	Year	Purpose	N	Duration
Rasinksi	1990b	RR, LWR	20	two 4-day cycles
Rasinski, et al.	1994a	FDL	54	daily Nov-May
Griffith, Rasinski	2004	RT	23	six years
Begeny, Martens	2006	isolated words, RR, PP, PD	12	9-11 weeks
Martens, et al.	2007	PD, LPP, RR	30	8 weeks

Table 2

Each study listed in Table 2 produced gains in oral reading fluency. The studies demonstrate the variety of fluency interventions that can be utilized over short time periods. Further research could determine if fluency gains are maintained and if the gains transfer to non-rehearsed texts. Therrien (2004) suggests that if RR is to be used for a fluency intervention, there are three essential components for transfer: (a) passages should be read aloud to an adult, (b) corrective feedback on word errors should be given, and (c) passages should be read until a child reaches a pre-established number of correct words read per minute within a certain time limit.

Begeny and Martens (2006) and Martens et al. (2007) conducted research that encompassed multiple treatments. Including a combination of treatments enables the teacher to reach different levels of reading fluency within the classroom. However, it would be beneficial to examine the research process used and determine which treatment produced the greatest gains.

Extensive research of RR abounds, whereas very little current research is available for phrased-text cues and its transfer for long-term fluency gains. Future research can target this strategy and its effectiveness improving oral reading fluency. More importantly, fluency-based programs have gone from an intervention technique used with a few students to a strategy that enables a teacher to differentiate for all students based on their fluency rates. The leading research on fluency indicates that the most successful interventions are a combination of treatments: (a) listening passage, (b) repeated reading, and (c) performance feedback. Ultimately, educational leaders can use this information to provide professional development training to staff, teachers, administrators, and program directors on best practices in reading. Further, educational leaders can also use the identified best practices for guiding the school community on the importance of examining the fluency rates of their students and developing a series of proven fluency interventions to create stronger readers for both at-risk and on-grade levels students. In summary, I conducted this study because as a principal and educational leader I wanted to know the best strategies to improve the reading levels for the students at my school.

8 References

Allington, R. L. (1983). Fluency: The neglected goal. The Reading Teacher, 36, 556-561.

Anderson, B. (1981). The missing ingredient: Fluent oral reading. The Elementary School Journal, 81, 173-177.

Begeny, J. C., Daly, E. J., & Vallely, R. J. (2006). Improving oral reading fluency through response opportunities: A comparison of phrase drill error correction with repeated readings. Journal of Behavioral Education, 15, 229-235.

Begeny, J. C., & Martens, B. K. (2006). Assisting Low-Performing Readers with a Group-Based Reading Fluency Intervention. School Psychology Review, 35, 91-107.

Burns, M. K. & Wagner, D. (2008). Determining an Effective Intervention Within a Brief Experimental Analysis for Reading: A Meta-Analytic Review. School Psychology Review, 17, 126-136.

Chard, D. J., Vaughn, S. & Tyler, B. J. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. Journal of Learning Disabilities, 35, 386-406.

Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). Fourth-grade students reading aloud: NAEP 2002 special study of oral reading (NCES 2006-469). U.S. Dept. of Education. Institute of Education Sciences, National Center for Education Statistics. Washington, D.C.: Government Printing Office.

Griffith, L. W. & Rasinski, T. V. (2004). A focus on fluency: How one teacher incorporated fluency with her reading curriculum. The Reading Teacher, 58, 126-137.

Hosp, M. K., Hosp, J. L., & Howell, K. W. (2007. The ABCs of CBM. How to conduct reading CBM (pp. 31-54). New York, NY: Guilford Press.

Lyon, G. R. & Moats, L. C. (1997). Critical Conceptual and methodological considerations in reading intervention research. Journal of Learning Disabilities, 30, 578-588.

Martens, B. K., Eckert, T. L., Begeny, J. C., Lewandowski, L. J., DeGennaro, F. D., Montarello, S.A., et al. (2007). Effect of a fluency-based program on the reading performance on low-achieving second and third grade students. Journal of Behavioral Education, 16, 39-54.

National Center for Education Statistics (2004). The nation's report card: Reading highlights 2003. Washington, DC: US Department of Education.

National Institute of Child Health and Human Development. (2000). Teaching children to read: An evidence-based assessment of the scientific literature on reading and its implications for reading instruction. Washington, D. C.: U.S. Government Printing Office.

Rasinski, T.V., et al. (1987). The effects of reading phrased texts on readers' comprehension and fluency: An exploratory study. Annual Meeting of the National Reading Conference. Clearwater, FL. (ERIC Document Reproduction Service No. ED 291079)

Rasinski, V. T. (1990a). The effects of cued phrase boundaries on reading performance: A review. Kent, Ohio: Kent State University. (ERIC Document Reproduction Service No. ED313689)

Rasinski, V. T. (1990b). Effects of repeated reading and listening-while-reading on reading fluency. Journal of Educational Research, 83, 147-150.

Rasinski, V. T., Padak, N., Linek, W., & Sturtevant, E. (1994a). Effects of fluency development on urban second-grade readers. Journal of Educational Research, 87, 158-165.

Rasinski, T. V. (1994b). Developing syntactic sensitivity in reading through phrase-cued texts. Intervention in School and Clinic, 29, 165-168.

Rasinski, T.V. (2003). The fluent reader: Oral reading strategies for building work recognition, fluency, and comprehension. Creating Synergy: Lessons that integrate oral reading activities (pp.121-143). New York: Scholastic.

Rasinski, T. V. (2004). Creating fluent readers. Educational Leadership, 46-51.

Thierren, W.J. (2004). Fluency and comprehension gains as a result of repeated reading: a meta-analysis. Remedial and Special Education, 25, 252-261.

Tyler, B. & Chard, D. (2000, April). Using readers theatre to foster fluency in struggling readers: A twist on the repeated reading strategy. Reading & Writing Quarterly, 16), 163. Retrieved June 16, 2008, from Academic Search Complete database: http://web.ebscohost.com

U.S. Department of Education, National Center for Educational Statistics, Common Core of Data (CCD). (n.d.). 2005-06 Public elementary/secondary school universe survey. Retrieved June 16, 2008, from, http://nces.ed.gov/programs/stateprofiles/ 1

¹http://nces.ed.gov/programs/stateprofiles/